

INTERNATIONAL SEARCH REPORT

Inte...al Application No
PCT/GB2004/005225

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 F01N3/023 F01N3/035 F01N3/28

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 7 F01N

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EP0-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 4 449 362 A (FRANKENBERG ET AL) 22 May 1984 (1984-05-22) column 4, line 7 - line 48 figures 1,2	1-3,8,9, 11-15, 18-20, 22,26-28
X	US 4 462 812 A (BLY ET AL) 31 July 1984 (1984-07-31) column 8, line 30 - line 52 figure 5	1-3,8,9, 11,19, 20,22, 23,26-28
-/-		

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

* Special categories of cited documents :

- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier document but published on or after the international filing date
- "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

- "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&" document member of the same patent family

Date of the actual completion of the international search

7 April 2005

Date of mailing of the international search report

15/04/2005

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+31-70) 340-3016

Authorized officer

Ikas, G

INTERNATIONAL SEARCH REPORT

Int. ... al Application No
PCT/GB2004/005225

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 4 319 896 A (SWEENEY ET AL) 16 March 1982 (1982-03-16) column 3, line 4 - line 65 figure 2	1-3,8,9, 11,19, 23,26-28
X	GB 2 007 529 A (TEXACO DEVELOPMENT CORP) 23 May 1979 (1979-05-23) page 3, line 66 - line 69 claim 1 figure 1	1-3,8,9, 11,19, 22,26-28
X	DE 87 90 076 U1 (SIMMERLEIN-ERLBACHER, EWALD WILHELM, 8570 PEGNITZ, DE) 31 August 1989 (1989-08-31) page 15, line 9 - line 20 claims 1,10 figure 1	1,19, 26-28
A	EP 1 312 776 A (ISUZU MOTORS LIMITED) 21 May 2003 (2003-05-21) paragraphs '0089! - '0091! figures 1,2,19	16-18, 23-25
A	US 5 103 641 A (MAUS ET AL) 14 April 1992 (1992-04-14) cited in the application column 5, line 45 - line 60 column 6, line 53 - line 65 figures 1,2,9-12	1-7,11, 19,22, 26-28

INTERNATIONAL SEARCH REPORT

Information on patent family members

Inter. Application No
PCT/GB2004/005225

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
US 4449362	A	22-05-1984	US 4505106 A	19-03-1985
US 4462812	A	31-07-1984	DE 3371385 D1	11-06-1987
			EP 0112634 A1	04-07-1984
			JP 1059407 B	18-12-1989
			JP 1574686 C	20-08-1990
			JP 59115419 A	03-07-1984
US 4319896	A	16-03-1982	US 4331454 A	25-05-1982
GB 2007529	A	23-05-1979	AU 521733 B2	29-04-1982
			AU 3915578 A	28-02-1980
			BR 7805030 A	29-05-1979
			DE 2845928 A1	10-05-1979
			IT 1100918 B	28-09-1985
			JP 54069613 A	04-06-1979
			JP 58000567 B	07-01-1983
			NZ 188268 A	07-09-1982
			ZA 7804657 A	27-12-1979
DE 8790076	U1	31-08-1989	DE 3637428 A1	19-05-1988
			DE 3711294 A1	19-05-1988
			AT 72139 T	15-02-1992
			AU 605520 B2	17-01-1991
			AU 8153187 A	25-05-1988
			CA 1315668 C	06-04-1993
			DD 268403 A1	31-05-1989
			DE 3776511 D1	12-03-1992
			WO 8803049 A1	05-05-1988
			DK 361588 A	24-08-1988
			EP 0269864 A1	08-06-1988
			FI 891951 A ,B,	25-04-1989
			JP 6055252 B	27-07-1994
			JP 2500962 T	05-04-1990
			KR 9601583 B1	02-02-1996
			NO 882754 A ,B,	22-06-1988
			US 4938787 A	03-07-1990
			ZA 8708167 A	27-07-1988
EP 1312776	A	21-05-2003	JP 2003148141 A	21-05-2003
			JP 2003148125 A	21-05-2003
			JP 2003155909 A	30-05-2003
			JP 2003155910 A	30-05-2003
			JP 2003155922 A	30-05-2003
			JP 2003161138 A	06-06-2003
			EP 1312776 A2	21-05-2003
			US 2003097834 A1	29-05-2003
US 5103641	A	14-04-1992	DE 3733402 A1	13-04-1989
			DE 3866244 D1	19-12-1991
			WO 8902978 A1	06-04-1989
			EP 0386013 A1	12-09-1990
			ES 2009047 A6	16-08-1989
			JP 7091972 B	09-10-1995
			JP 2502110 T	12-07-1990
			SU 1839696 A3	30-12-1993
			US 5150573 A	29-09-1992